

Date: Wed, 8 Jun 94 04:30:22 PDT  
From: Ham-Digital Mailing List and Newsgroup <ham-digital@ucsd.edu>  
Errors-To: Ham-Digital-Errors@UCSD.Edu  
Reply-To: Ham-Digital@UCSD.Edu  
Precedence: Bulk  
Subject: Ham-Digital Digest V94 #186  
To: Ham-Digital

Ham-Digital Digest                      Wed, 8 Jun 94                      Volume 94 : Issue 186

Today's Topics:

Baycom Driver for AX.25  
Baycom software ftp site? FAQ loc.?  
DRSI Card wanted  
DSP Implementation of 16QAM schemes?  
Mac software for PK232?  
TAPR disks  
TI 320C26 DSP Eval Kit (2 msgs)

Send Replies or notes for publication to: <Ham-Digital@UCSD.Edu>

Send subscription requests to: <Ham-Digital-REQUEST@UCSD.Edu>

Problems you can't solve otherwise to brian@ucsd.edu.

Archives of past issues of the Ham-Digital Digest are available  
(by FTP only) from UCSD.Edu in directory "mailarchives/ham-digital".

We trust that readers are intelligent enough to realize that all text  
herein consists of personal comments and does not represent the official  
policies or positions of any party. Your mileage may vary. So there.

-----  
Date: 7 Jun 94 18:34:12 GMT  
From: dog.ee.lbl.gov!ihnp4.ucsd.edu!swrinde!news.uh.edu!nuchat!  
acs@ucbvax.berkeley.edu  
Subject: Baycom Driver for AX.25  
To: ham-digital@ucsd.edu

--  
A. C. Spraggins                      acs@nuchat.sccsi.com  
South Coast Computing Services, Inc.      w5ezm@sugarland.ampr.org  
P. O. Box 270355                      (713) 917-5000  
Houston, TX 77277-0355                  (713) 917-5005 fax

-----  
Date: 8 Jun 94 04:23:50 GMT  
From: dog.ee.lbl.gov!agate!howland.reston.ans.net!darwin.sura.net!

wvnmms.wvnet.edu!un107332@ucbvax.berkeley.edu  
Subject: Baycom software ftp site? FAQ loc.?  
To: ham-digital@ucsd.edu

I need to know where I can ftp the Baycom software from .. also,  
is there an FAQ for this group? I looked through past articles and didn't  
see it ...did I miss it? If there is one, and it just hasn't been posted,  
can someone post the ftp site to get it from if it is archived?

Thanks,

Laurent

p.s. Does anyone know if there are any packet modems that handle regular  
data, with phone line, as a regular modem? And has anyone done anything  
with the idea of using a Soundblaster as a packet modem?

-----  
Date: 7 Jun 1994 15:48:33 +0200  
From: ihnp4.ucsd.edu!swrinde!howland.reston.ans.net!math.ohio-state.edu!  
jussieu.fr!univ-lyon1.fr!ghost.dsi.unimi.it!maya.dei.unipd.it!ada.dei.unipd.it!  
DEI@network.ucsd.edu  
Subject: DRSI Card wanted  
To: ham-digital@ucsd.edu

Hallo, All !

I'm Paolo, from Italy, and I'm searching a DRSI card that can be use with F6FBB  
packet bbs software.

It must have two port channel, without modem , and must operate at 38400 baud in  
both channel.

Here, in Italy, i don't found it....is there anyone that could give me any  
information about.

Thank you very much, and see you soon !!

Paolo

--

bye bye..... Paolo iw3grx @maya.dei.unipd.it << internet address  
iw3grx @iw3grx.iven.ita.eu << packet address

-----  
Date: 7 Jun 1994 20:14:54 GMT  
From: ihnp4.ucsd.edu!usc!nic-nac.CSU.net!charnel.ecst.csuchico.edu!psgrain!  
ticsa.com!aztec.co.za!nlaw@network.ucsd.edu  
Subject: DSP Implementation of 16QAM schemes?  
To: ham-digital@ucsd.edu

Hello All

I am looking for information on whether it is possible to implement a 16QAM (or TCM) modulator and demodulator at a raw data rate of 64kbit/s and greater (128kbit/s), using a DSP.

The intended application is for a fixed, point-to-point, digital radio link.

I would appreciate any info, or references to someone who may know more about this field.

Thanks in advance.

--

```
=Nigel Lawrence=
nlaw@aztec.co.za      / ^ \ / '      ' \ / ' - _  -- ( _ ) -- 2004
-Cape Town, South Africa --> "the Mother City" <-- / \  Olympics
                                     in Africa!
```

-----  
Date: 7 Jun 1994 11:23:02 -0400  
From: newstf01.cr1.aol.com!search01.news.aol.com!not-for-mail@uunet.uu.net  
Subject: Mac software for PK232?  
To: ham-digital@ucsd.edu

In article <vasrat-070694001739@tvtwo.com>, vasrat@shell.portal.com  
(John F. Braun) writes:

Check out the list I just sent out to the net... but Savant does everything to control a 232MBX. Here is the info from the list:

<Savant 1.0.2>

A new packet terminal front-end by the author of Virtuoso. Savant has a split window interface, but it's also a multi-window, multi-connection interface and will work with almost any TNC, unlike MacRatt or HostMaster.

A demo version of the product is available at cpre1.ee.iastate.edu (pub/ke0ph) or via US Mail, send a SAS disk mailer and disk to CM Technologies, Inc., RR#1, Box 83A, Kelley, IA 50134 (515) 597-2051.

System 7, 32-bit, '040 cache clean and it supports the required AppleEvents.

73 for now.... c u on the shortwaves  
Terry Stader - KA8SCP  
America Online Ham Radio Club Host  
Macintosh Amateur Radio Software List Maintainer  
Internet: tstader@aol.com (e-mail) or  
p00489@psilink.com (binaries/files >28K)  
KA8SCP@WA1PHY.#EMA.MA.USA.NOAM

ka8scp@ka8scp.ampr.org [44.56.4.82] Mac  
[44.56.4.120] DOS Clone  
(they're BOTH pc's!)

-----  
Date: 8 Jun 94 00:02:51 GMT  
From: news-mail-gateway@ucsd.edu  
Subject: TAPR disks  
To: ham-digital@ucsd.edu

There have been several messages recently regarding getting software from TAPR.

TAPR has a semi-extensive disk library, which is also available through the Internet at hereford.ampr.org. To answer specific questions:

>Does tapr also have the hex file for the dcd state machine? I'd like to see it.  
>Might make a 3105 modem more usable for packet!

>Dave Bashaw  
>wa6qwl

The TNC-2 eprom images including the state machine are available on disk from TAPR or from the Internet at hereford.ampr.org in /pub/hamradio/tapr/disk07.

>Currently looking at the "paket 5.1" program from Australia. Is this the  
>latest version of the program or is there an update available! If there is an  
>update - where is it available for downloading? I do not have access to CIS!  
>  
>Thanks for any information that you have to offer on "paKet 5.1" I have tried  
>contacting the author, the USA lliason but no response from either of them for  
>weeks now!

PaKet 5.1 is available on disk from TAPR from hereford.ampr.org in /pub/hamradio/tapr/disk35.

See /pub/hamradio/tapr/00Index for a complete list.

To get any of these in disk form, contact

Tucson Amateur Packet Radio  
8987-309 E. Tanque Verde Rd. #337  
Tucson, AZ 85749-9399  
(817) 383-0000  
(817) 566-2544 FAX

Bob

-----  
Bob Nielsen, W6SWE                      Internet: w6swe@tapr.org  
Tucson, AZ                              Amateur IP: 44.124.12.16  
   ax.25: w6swe@wb7tls.az.usa.na  
-----

Date: 7 Jun 94 17:05:29 GMT  
From: lhdsy1!nntpserver.chevron.com!arba.sr.chevron.com@uunet.uu.net  
Subject: TI 320C26 DSP Eval Kit  
To: ham-digital@ucsd.edu

> on order that should arrive tomorrow.  
Who did you order it from? Arrow told me that mine was on 3 weeks back  
order, which would make mine due in another week, at least.

Andy R. Barrow  
Chevron Information Technology Company  
BTD/NE/WAN  
internet: arba@chevron.com  
-----

Date: 7 Jun 1994 09:50:16 -0700  
From: nntp.crl.com!crl3.crl.com!not-for-mail@decwrl.dec.com  
Subject: TI 320C26 DSP Eval Kit  
To: ham-digital@ucsd.edu

Andy Barrow (arba@chevron.com) wrote:  
: > on order that should arrive tomorrow.  
: Who did you order it from? Arrow told me that mine was on 3 weeks back  
: order, which would make mine due in another week, at least.

Mine just came yesterday. Call Wyle Elec: 1-800-414-4144

--  
Henry Smith (hbs@crl.com)  
-----

Date: Tue, 7 Jun 1994 14:02:27 GMT  
From: ihnp4.ucsd.edu!swrinde!emory!rsiatl!ke4zv!gary@network.ucsd.edu  
To: ham-digital@ucsd.edu

References <1994Jun2.105141.15184@cnsvax.uwec.edu>,  
<1994Jun3.142041.6981@ke4zv.atl.ga.us>, <CqzIEo.LKB@world.std.com>  
Reply-To : gary@ke4zv.atl.ga.us (Gary Coffman)  
Subject : Re: An open note to Gary Coffman, KE4ZV

In article <CqzIEo.LKB@world.std.com> dts@world.std.com (Daniel T Senie) writes:  
>In article <1994Jun3.142041.6981@ke4zv.atl.ga.us> gary@ke4zv.UUCP (Gary Coffman)  
writes:

>>

>>Talking KISS is not the answer, there is already a packet driver that  
>>can do that. What you have to have is the entire AX25 set embedded in  
>>the driver so that it can enclose the IP packets in an AX25 envelope  
>>and then enclose \*that\* in a KISS envelope for delivery to the KISS  
>>TNC. An AX25 driver is not something that can easily be made a TSR.  
>>It has to maintain state, it has to have various timers running, and  
>>it has to do link level address resolution via the arp agent. That's  
>>difficult to do on a single threaded operating system like DOS where  
>>preemptive multitasking isn't native.

>

>Gary, your information is many years out of date. Constructing TSRs with  
>state information, disk I/O and beyond are not difficult, and toolsets  
>are available to assist in such creations.

:-) :-) :~)

Ah, thank you, I haven't had such a good laugh in a long time.

>Preemptive multitasking is NOT  
>a requirement for networking. Look inside a router from any of the major  
>router manufacturers. You will find NON-preemptive scheduling, if you  
>find much scheduling at all. Summary: TCP/IP does NOT require Unix.

Of course it doesn't, as long as all it's tasks are internal, look  
at NET, NOS' predecessor, as an example. It's a fine router all by  
itself, just don't ask it to work with separately compiled user  
applications on the same box at the same time. Then you're looking  
at TSR hell, locked or crashed machines, and poor performance at  
best.

Gary

--

Gary Coffman KE4ZV		You make it,		gatech!wa4mei!ke4zv!gary
Destructive Testing Systems		we break it.		uunet!rsiatl!ke4zv!gary
534 Shannon Way		Guaranteed!		emory!kd4nc!ke4zv!gary
Lawrenceville, GA 30244				

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Date: 7 Jun 1994 16:04:15 GMT

From: ihnp4.ucsd.edu!usc!howland.reston.ans.net!europa.eng.gtefsd.com!  
news.umbc.edu!eff!news.kei.com!ub!dsinc!netnews.upenn.edu!gopher.cs.uofs.edu!  
triangle.cs.uofs.edu!bill@network.ucsd.edu  
To: ham-digital@ucsd.edu

References <2sjnjm\$58b@news.icaen.uiowa.edu>, <Cqs2uv.Lnt@world.std.com>,  
<2sleak\$7lc@network.ucsd.edu>dsi

Subject : Re: An open note to Gary Coffman, KE4ZV

In article <2sleak\$7lc@network.ucsd.edu>, brian@nothing.ucsd.edu (Brian Kantor) writes:

|> The proper approach, as I see it, is to use a minimal NOS to act solely  
|> as a protocol converter between packet radio and the household ethernet.  
|>  
|> You can then use your Mac, X-terminal, BSDI, Sun, SGI, or whatever else  
|> you want to do packet.  
|>  
|> The mistake is in thinking that NOS is all there is, and that you have  
|> to be at the console. NOS doesn't even need to have a console, and you  
|> don't have to be there.  
|>  
|> A simple 286 (what, \$59 for the motherboard?) running with just a floppy  
|> is sufficient. Add a DRSI card, or a PI card, or a PacketTwin card, or  
|> even a serial card running KISS to a TNC, and you're up.  
|> - Brian

I can not believe that hams are still arguing about this. Brian, you must have made this same statement a thousand times in the past 10 years. It appears that still, no one is listening to you. It really is sad though. With the availability of Residential SLIP/PPP at 14.4K (it costs \$27 a month here in the backwoods of NE PA) I find it hard to believe that anyone is still trying to do Packet TCP/IP networks. I have had a connection between Packet and the University's LAN (and the INETRNET) for over 5 years. I am getting ready to de-commission it because it has outlived it's usefulness. Wireless LANs are old hat. What happened to hams pushing the technology envelope?? Why are we still arguing about how to do something that was solved years ago?? Some things will never change I guess. I'll go back to sleep and peek at this group in another 5 years.

Oh yeah. If someone can tell me about any NETROM wormholes running across the INTERNET using NOS, I will probably see if the local BBS guru wants to use my link rather than just turning it off.

All the best.

bill KB3YV

--

Bill Gunshannon | de-moc-ra-cy (di mok' ra see) n. Three wolves  
bill@cs.uofs.edu | and a sheep voting on what's for dinner.  
University of Scranton |  
Scranton, Pennsylvania | #include <std.disclaimer.h>

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Date: 7 Jun 1994 18:52:20 +0100  
From: ihnp4.ucsd.edu!swrinde!pipex!uknet!acorn!not-for-mail@network.ucsd.edu  
To: ham-digital@ucsd.edu

References <1994Jun2.105141.15184@cnsvax.uwec.edu>,  
<1994Jun3.142041.6981@ke4zv.atl.ga.us>, <CqzIEo.LKB@world.std.com>  
Subject : Re: An open note to Gary Coffman, KE4ZV

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> Gary, your information is many years out of date. Constructing TSRs with  
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> a requirement for networking. Look inside a router from any of the major  
> router manufacturers. You will find NON-preemptive scheduling, if you  
> find much scheduling at all. Summary: TCP/IP does NOT require Unix.

But a router is not an application support system - it's quite different.  
A router has a small number of fixed tasks that can be made to have well-defined  
dependencies on each other. The tasks are relatively simple, and most of them  
are needed most of the time.

Applications are generally large, have diverse needs (dependencies on  
filesystems, user, console as well as network) and suffer from considerable  
design constraints if forced to poll for work not related to the current  
thread (such as processing packet routing while doing a disc-bound operation).

So no, TCP/IP does not require Unix. In fact, I understand that Phil Karn  
(who ought to know what NOS is good for, if anyone does) stopped adding  
applications to NOS some time ago, and uses it as a router. He runs the  
applications under Unix, which does a good job of it. This is especially  
true where the system is primarily a server rather than an end-user's  
node - an end user will tolerate slowdown on a background task while his  
foreground task gets the attention. But where that background task is  
someone else's foreground, or a network router, the compromise is  
less acceptable.

>



>Windows is not at this stage a kludge or bandaid to DOS. Those in the software  
>business who thought that are generally not in the software business any more.  
>There are several TCP/IP stacks running as VxD drivers under Windows. There is  
>no reason at all why an AX.25 stack could not be placed under them.  
>

MS-Windows is a kludge : sales successes don't make that untrue.  
But all engineering is a kludge in the sense of a compromise between ideal  
design and economic necessity. Windows makes a trade-off that happens  
to benefit Microsoft and the application developers more than it does  
the users, but sufficient users are happy with that (because falling  
hardware costs help compensate for the inefficiencies of a cooperative  
multitasker) that the product sells.

>All that is needed is someone with the time to dedicate to doing this work.  
>Perhaps someone could get permission to do it as a master's project or  
>something.

Time and inclination. Software is written for fun and/or profit : if there's  
no profit, it has to be fun. The number of people who are both willing to  
live within the constraints of DOS and write significant pieces of software  
for fun is, I think, falling rather rapidly.

The suggestion of an AX.25 driver and IP stack that provides an API to  
arbitrary applications has been made a number of times (including by myself).  
When I suggested it, the chief reason it wasn't useful was that DOS's memory  
management was too poor to permit usefully spawning multiple programs with  
differing lifetimes - i.e. there was a considerable advantage to having a  
single executable that did all the jobs you might require, despite the  
attendant disadvantages. MS-Windows has probably reduced those problems, but  
now many of the people who had the knowledge and interest to do the job  
have migrated to Linux or other Unix-like systems. It just isn't fun to  
spend more of your time fighting the limitations of the system than  
solving the real problem.

In short : it's a perfectly acceptable idea that suffers from a few  
limitations. If you want it though, you can't expect anyone else to do  
it for you - their time is just as precious as yours. So do it yourself.

-adrian

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End of Ham-Digital Digest V94 #186

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